Contributors

Richard E. Cofield received a BS in applied physics from the California Institute of Technology (Pasadena, California) in 1974, and an MS in electrical engineering from the University of Southern California (Los Angeles, California) (UCLA) in 1982. In 1978 Mr. Cofield joined the Jet Propulsion Laboratory (Pasadena, California) (JPL) to design, analyze, and calibrate antenna and optical systems for spaceborne radar and radiometer instruments observing the Earth. His interests include reflector antennas and quasi-optical feed systems.

Gregory L. Davis holds a PhD in mechanical engineering from Rice University (Houston, Texas). Dr. Davis holds both a BS and an MS in physics from the University of Akron (Akron, Ohio). Dr. Davis has worked for the past 16 years as a member of the technical staff in mechanical engineering at JPL, and is currently the lead technologist for the Mechanical Systems Division. Prior to that, Dr. Davis was the supervisor of the Advanced Deployable Structures Group, which has interests in developing novel, lightweight structures for space applications. Previously, Dr. Davis served as the mechanical systems engineer for cruise, entry, descent, and landing on the Mars Exploration Rover (MER) Project.

Mark S. Gatti received his BS in electrical engineering from New Mexico State University (Las Cruces, New Mexico) in 1980 and his MS in electrical engineering from California State University, Northridge (Northridge, California) in 1986. Mr. Gatti joined JPL in 1981 working in spacecraft radio frequency (RF) systems and in antenna design, analysis, and test. Mr. Gatti has held management positions within the Deep Space Network (DSN) and was the deputy section manager of the Communications Ground System Section. Most

recently, Mr. Gatti has been serving as the system manager during the pre-project activities of the proposed DSN Array project.

Richard E. Hodges received his BS in electrical engineering from the University of Texas at Austin, his MS in electrical engineering from California State University, Northridge, and his PhD in electrical engineering from the University of California, Los Angeles. Dr. Hodges' previous work experience includes Hughes Aircraft Company Radar Systems Group, Rantec/MDM (Chatsworth, California), and Raytheon Antenna/Nonmetallics Technology Center (Los Angeles, California). Dr. Hodges has been at JPL from 1988 through 1993 and from 2001 to the present. Dr. Hodges is the group supervisor for the Spacecraft Antennas Group.

Daniel J. Hoppe received a BS and an MS in electrical engineering from the University of Wisconsin Madison in 1982 and 1983, respectively. Dr. Hoppe received a PhD in electrical engineering from the University of California, Los Angeles (UCLA) in 1994. In 1984 Dr. Hoppe joined JPL, where he is currently a principal engineer. At JPL Dr. Hoppe has developed software for the solution of a number of electromagnetic scattering problems, has designed microwave components for the large antennas of the DSN, and has designed antennas for spacecraft applications. Most recently Dr. Hoppe has focused on diffraction modeling of large space-based telescopes.

John Huang received electrical engineering degrees of BS from Michigan Technology University (Houghton, Michigan) in 1970, MS from the University of California at Berkeley in 1971, and PhD from the Ohio State University (Columbus, Ohio) in 1978. Dr. Huang worked six years at the Naval Weapons Center, China Lake, California. Dr. Huang has been with JPL since 1980, where his research activities involve microstrip antennas, mobile vehicle antennas, antenna miniaturization techniques, spacecraft antennas, phased arrays, reflectarrays, and inflatable antennas.

William A. Imbriale received a BS in engineering physics from Rutgers, the State University of New Jersey (New Brunswick, New Jersey) in 1964; an MS in electrical engineering from UCLA in 1966; and a PhD in electrical engineering from the University of Illinois at Urbana-Champaign in 1969. Dr. Imbriale joined JPL in 1980 and is a senior research scientist in the Communications Ground System Section. Dr. Imbriale has led advanced technology developments for large ground-station antennas, lightweight spacecraft antennas, and millimeter-wave spacecraft instruments and is currently principle investigator on a NASA technology contract. Dr. Imbriale also served as the assistant manager for microwaves in the Ground Antennas

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Rolando L. Jordan received his BS and MS in electrical engineering from the Massachusetts Institute of Technology (Cambridge, Massachusetts) (MIT) in 1959 and 1962, respectively. Mr. Jordan has been with JPL since 1963 and is a principal engineer in the Radar Science and Engineering Section. Mr. Jordan has been system engineer for a number of spaceborne radar systems including the Apollo 17 Lunar Sounder, the Seasat-A synthetic aperture radar system, the Spaceborne Imaging Radar-C, and the Mars Advanced Radar for Subsurface and Ionospheric Sounding for the Mars Express spacecraft.

Yunjin Kim received his MS and PhD in electrical engineering from the University of Pennsylvania (Philadelphia, Pennsylvania) in 1985 and 1987, respectively. Dr. Kim received his BS in electrical engineering from the California State University, Sacramento, in 1983. Dr. Kim has participated in spaceborne radar development at JPL since 1989. Currently, Dr. Kim is the Hydros project manager.

Roberto Mizzoni received his PhD in physics from the University of Rome, Italy, in 1984. Before joining Alenia Spazio (Rome, Italy) in 1987, Dr. Mizzoni worked on two-dimensional radars and three-dimensional phased arrays at Selenia S.p.A. (Rome, Italy) and on broadband direction finding/ electromagnetic compatible antennas at Elettronica S.p.A. (Rome Italy). Dr. Mizzoni has extensive experience in the design and development of space antennas for telecommunication, Earth observation, navigation and science. Dr. Mizzoni is co-holder of three patents and is head of the antenna electrical design unit at Alcatel Alenia Space (Rome, Italy).

Rebekah L. Tanimoto received her BS in aerospace Engineering from UCLA in 2004. Ms. Tanimoto is currently working on her MS in aerospace engineering at UCLA. Ms. Tanimoto has been with JPL since 2004, working in the area of advanced deployable structures.

Joseph Vacchione received electrical engineering degrees of a BS from Northeastern University (Boston, Massachusetts) in 1985, an MS from the University of Illinois at Urbana-Champaign, and a PhD from the same institution in 1990. Dr. Vacchione joined JPL in 1990 where he has worked on design and development of antennas for space-flight applications. Dr. Vacchione has extensive experience in antennas used for both deep-space telecommunications purposes and for antennas used as part of remote sensing science instruments. Dr. Vacchione is currently the antenna lead for an Earth-orbiting science instrument.